



DEPARTMENT OF THE NAVY

NAVAL WEAPONS STATION YORKTOWN

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YORKTOWN, VA 23691-0160

WPNSTA YORKTOWNINST 5090.14

Environmental

14 Sep 04

NAVAL WEAPONS STATION YORKTOWN INSTRUCTION 5090.14

Subj: NAVAL WEAPONS STATION YORKTOWN (WPNSTA YORKTOWN) EXPLOSIVE  
HAZARDOUS WASTE MANAGEMENT PLAN (EHWMP)

Ref: (a) Code of Federal Regulations (CFR), Title 40  
(b) Department of Defense Policy to Implement the EPA's  
Military Munitions Rule of 27 July 1998  
(c) Virginia Hazardous Waste Management Regulations  
(d) CFR, Title 49  
(e) CFR, Title 29  
(f) OPNAVINST 5090.1B  
(g) OPNAVINST 4110.2  
(h) NAVSEA OP5, Volume 1 (Seventh Revision)  
(i) NOSSAINST 8023.11A  
(j) DOD Manual 4160-21-M Defense Material Disposition  
Manual  
(k) DOD Manual 4160-21-M-1 Defense Demilitarization Manual

Encl: (1) Explosive Hazardous Waste Management Plan

1. Purpose. To establish policy, procedures, responsibilities, and guidelines for use by Naval Weapons Station Yorktown, tenant commands, and contractors during handling, accumulation (storage), and turn-in of explosive hazardous waste (EHW).

2. Background

a. The Resource Conservation and Recovery Act (RCRA) of 1976 established a framework for national programs to achieve environmentally sound management for hazardous and non-hazardous wastes. Subtitle C of RCRA is specific to hazardous waste (HW) and is the basis for U.S. Environmental Protection Agency (EPA) regulations that define HW and how it must be managed. In 1992, the Federal Facility Compliance Act (FFCA) was signed into law and required the EPA, in consultation with Department of Defense (DOD) and the States, to publish regulations identifying when conventional and chemical military munitions become HW subject to Subtitle C of RCRA. The regulations, the Military Munitions Rule (MR) (40 CFR 260), define when military munitions become waste military munitions (WMM) and how these WMM will be managed. The MR became effective on 12 August 1997, and it is codified in reference (a).



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b. EHW is defined as: All military munitions classified as WMM by DOD/Navy Designated Disposition Authority (DDA) or Authorized Military Official (AMO); all WMM defined in 40 CFR 266.202 (b), (c), and (d); and all non-military munitions and explosive waste generated from production, testing, maintenance, or laboratory activity, that are listed or characteristic HW items. In essence, EHW is HW that has a "reactive" characteristic and must be managed under the same laws and regulations as non-explosive HW in addition to NAVSEA OP5 and local explosive safety requirements. Therefore, throughout this document you will see HW requirements that are applicable to EHW. Any conflicts between HW requirements and military munitions management shall be referred to the Naval Ordnance Safety and Security Activity (NOSSA) for resolution.

c. Reference (b) provides DOD policy necessary to determine when military munitions become EHW. Explosives and EHW accumulated/stored on or transported to/from naval shore activities are regulated by references (a) through (h) as applicable. Military munitions safety requirements, regardless of classification as EHW, are established in reference (h). Reference (i) delineates guidelines for writing Standard Operating Procedures (SOPs).

3. Scope. This EHWMP is applicable to Naval Weapons Station Yorktown, tenants, and any contractors who generate, handle, transport, or manage EHW, or perform any operation that has the potential to generate EHW.

#### 4. Policy

a. All EHW shall be managed in accordance with this EHWMP.

b. Naval Weapons Station Yorktown, tenants, and contractors are **not** authorized to receive or treat EHW from other activities within or outside of WPNSTA Yorktown, except when emergency responses are necessary as requested by military or civilian law enforcement or emergency response authorities.

c. The generator of EHW at WPNSTA Yorktown, tenants, and contractors responsible to ensure that all EHW is managed according to this EHWMP.

5. Action. WPNSTA Yorktown, tenants, and contractors will:

a. Conduct their operations in a manner that reduces or eliminates the generation of EHW.

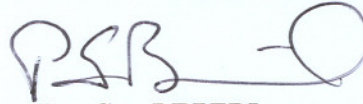
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b. Reuse, reclaim, or recycle material to the maximum extent possible.

c. Assign personnel to the role of Explosive Hazardous Waste Coordinators (EHW Coordinators) as outlined in this EHWMP.

d. Manage EHW according to Federal and State regulations, and all applicable Navy directives identified in this EHWMP.

6. Directive Review. The Environmental Compliance Department is responsible for the annual review and update of this instruction.



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Distribution:

List I, II, III (Case A)



## **EXPLOSIVE HAZARDOUS WASTE MANAGEMENT PLAN**

### **SECTION 1: Applicable Regulations and Permits**

Listed below are the primary regulations and permits that Naval Weapons Station Yorktown, tenant commands, and contractors must comply with to legally operate.

#### **1.1 Federal Laws and Regulations.**

Resource Conservation and Recovery Act (RCRA). The law was enacted in 1976 and is codified in 40 CFR 146, 148, and 260 - 299. These Parts regulate facilities that manage and/or dispose of HW including EHW.

Military Munitions Rule (MR) (62 FR 6621, February 12, 1997). The regulations became effective (under RCRA) 12 August 1997. These regulations define when military munitions become waste and how these WMM will be managed.

Hazardous Material Transportation Act (HMTA). The law was enacted in 1975 and is codified in 49 CFR Sections 106 - 180. These Parts prescribe the requirements of the Department of Transportation governing the transportation of hazardous materials (HM) (including HW and EHW) by rail car, aircraft, vessel, and motor vehicle.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The law was enacted in 1980 and focuses on closed waste site problems, spill responses, issues of liability, and cleanup funding. This law was reauthorized in 1986 by the Superfund Amendments and Reauthorization Act (SARA) and is codified in 40 CFR Parts 350 - 372.

#### **1. State Regulations.**

Virginia Hazardous Waste Management Regulations (VHWMR).

**1.3 State Permits.** The State has been delegated RCRA authority for the Hazardous Waste Facility Permit, Part B. This permit is required for facilities that treat, store (long term), and/or dispose of HW.

#### **1.4 Navy Directives, Instructions, and Plans.**

CNO Memo 5090 Ser N457F/452-98, July 98. Navy Military Munitions Rule Implementation Policy (MRIP) is Navy's policy to implement the EPA's MR. This policy document interprets the



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requirements of the MR and establishes and overarching policy for the management of WMM that is consistent among DOD Components.

NAVSEA OP5, Volume 1, Seventh Revision. Ammunition and Explosives Ashore, Safety Regulations for Handling, Storing, Production, Renovation, and Shipping. The purpose of this manual is two-fold: to acquaint personnel engaged in operations that involve ammunition, explosives, and other hazardous materials including associated chemicals and raw materials, with the characteristics and hazards of these items; and to specify standardized safety regulations for the research, development, production, renovation, care, handling, storage, preparation for shipment, and disposal of these items.

OPNAVINST 5090.1B. Environmental and Natural Resources Program Manual. This manual discusses requirements, delineates responsibilities and issues policy for the management of the environment and natural resources.

NAVSEA SW020-AC-SAF-010. This publication provides data required for the safe storage and transportation of Navy and Marine Corps conventional ammunition, explosives, and related hazardous materials.

COMNAVREG MIDLANT INSTRUCTION 5090.1 This instruction provides guidance on reporting, response, and clean-up procedures for major oil and hazardous substance incidents within Commander, Navy Region Mid-Atlantic (CNRMA).

OPNAVINST 5100.23C. This instruction formally implements the Navy Occupational Safety and Health (NAVOSH) Program.

## SECTION 2: Definitions

The following definitions are used throughout this document:

**2.1 Combustible Waste.** NAVSEA OP5 defines combustible wastes as any paper, oily rags, cotton waste, paints, solvents, volatile liquids and painting cloths.

**2.2 Conditional Exemption (CE).** An exemption from the regulatory definition of HW; therefore, from compliance with specific environmental requirements pertaining to the storage and transport of HW. This exemption is conditional in that compliance with certain criteria and requirements set forth in references (a) and (b) must be met.

**2.3 Demilitarize.** According to NAVSEA OP5, an item is demilitarized when the ammunition or explosive is rendered innocuous or ineffectual for military use.

**2.4 Designated Disposition Authority (DDA).** The only personnel in the DOD authorized to declare unused military munitions as EHW except in the case of an explosives or munitions emergency, abandoned munitions, or a declaration by the Authorized Military Official. The Navy has four DDAs, one each for large and small Navy missile systems, a third for cartridge/propellant-actuated devices, and a fourth for ammunition.

**2.5 EPA Hazardous Waste Code.** An EPA hazardous waste code should be written on the HW label for transportation to a treatment or disposal facility. These codes are defined in references (a) and (c).

**2.6 EPA Identification Number.** In order to legally generate, treat, store, dispose of, or transport HW, a facility must request and receive an EPA identification number.

**2.7 Excess Material.** A material is excess if it is usable but no one in the DOD has a current or projected need for it.

**2.8 Explosive-Contaminated Waste.** An explosive-contaminated waste is any inert material such as rags, paper, wood, plastic, or metal contaminated with an explosive material as defined by NAVSEA OP5. Explosive-contaminated waste that meets the characteristic of reactivity, as defined in Appendix A, is managed and disposed of as EHW. Explosive contaminated waste that does not possess the characteristic of reactivity, as defined in Appendix A, is a minutely explosive-contaminated waste.



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## **2.9 Explosive Hazardous Waste (EHW).**

1. An EHW may be a military munition or a non-military munition. While both military and non-military munitions may contain energetic fillers and/or components that are reactive as defined in Appendix A, only military munitions are regulated by the MR. Non-military munitions that become EHW must be managed as HW in accordance with Subtitle C of reference (a).

### **a. Military Munitions become waste when:**

(1) Abandoned by being disposed of, incinerated, or treated prior to disposal.

(2) Removed from a military magazine or other storage area for the purpose of treatment or disposal as directed by the appropriate DDA.

(3) Determined by a DDA to be damaged or deteriorated to the point they cannot be put into serviceable condition or cannot be reasonably used for some other purpose. An example would be when a Notice of Ammunition Reclassification (NAR) or similar document that requires treatment within a specified period.

(4) Declared a waste by an Authorized Military Official.

(5) Used or fired munitions that are transported off-range, buried, or land filled.

(6) Munitions that land off-range, if they are not promptly rendered safe and/or retrieved.

(7) Munitions that are deteriorated or damaged to the point that they cannot be put into serviceable condition and cannot reasonably be recycled or used for other purposes.

### **b. Non-military munitions or other explosives become waste when:**

(1) Discarded or considered inherently waste-like.

(2) Disposed of, burned, or incinerated.

(3) Accumulated, stored, or treated before or in lieu of being disposed of, burned, or incinerated.

(4) Used in a manner constituting disposal.



(5) Any other applicable local, state, or federal definition of HW is met.

**2.10 Explosives or Munitions Emergency Response.** An immediate response by explosives and munitions emergency response personnel to control, mitigate, or eliminate the actual or potential threat encountered during an explosives or munitions emergency. An explosives or munitions emergency response may include in-place render-safe procedures, treatment or destruction of the explosives or munitions or their transport to another location to be rendered safe, treated, or destroyed. Reasonable delay in the completion of an explosives or munitions emergency response, which a necessary, unforeseen or uncontrollable circumstances cause, do not terminate the explosives or munitions emergency. Explosives and munitions emergency responses can occur on either public or private lands and are not limited to responses at RCRA facilities.

**2.11 Explosives or Munitions Emergency Response Specialist.** Individuals trained in conventional or chemical munitions or explosives handling, transportation, render-safe procedures, or destruction techniques. Explosives or munitions emergency response specialists include DOD emergency Explosive Ordnance Disposal (EOD) technicians, Technical Escort Unit (TEU) personnel, DOD-certified civilian or contractor personnel; and other Federal, State, or local government, or civilian personnel similarly trained in explosives or munitions emergency responses.

**2.12 Hazardous Waste (HW).** A waste is hazardous if it meets any one of the definitions in Appendix A.

**2.13 Hazardous Waste Accumulation Site.** A site where properly packaged and labeled HW (i.e., EHW) may be accumulated without a permit prior to being shipped offsite for treatment or disposal. The two types of HW accumulation sites are a Satellite Accumulation Area and a 90-day Accumulation Area. Note that HW and explosives safety regulations are applicable to both accumulation sites. When there is a conflict between these regulations, the more stringent requirement applies.

**2.14 Hazardous Waste Generator.** A HW "generator" means any person whose act or process produces HW as identified in references (a) and (c), or Appendix A of this plan, or whose act first causes a HW to become subject to regulation.

# **1. Military Munitions.**

1. Any item that meets all of the criteria below:



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a. It is an ammunition product or component such as confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof; and it is

b. Produced or used by or for DOD or the U.S. Armed Services for national defense and security (including military munitions under the control of the DOD, the U.S. Coast Guard, the U.S. Department of Energy, and National Guard personnel); and

a. The production or use of the item is for national defense and security.

2. The following are excluded from the definition of Military Munitions:

a. Wholly inert items, defined as those munitions or munitions components that have never contained reactive materials.

b. Improvised explosive devices, defined as devices fabricated in an improvised manner that are designed to destroy, disfigure, distract, or harass and that consist of explosive, destructive, lethal, noxious, pyrotechnic, or incendiary chemicals. These non-standard devices may be made from military or non-military materials.

c. Nuclear weapons, devices, and components.

Note: The MR makes no changes to existing environmental regulations regarding waste materials produced incidental to the manufacturing or testing of explosives.

1. Specific Application of the definition of Military Munitions to Manufacturing, Research, Development, Testing, & Evaluation (RDT&E), and Renovation. These processes sometimes result in certain items that fail to meet specifications (rejects) or in the generation of materials that are incidental to the process (residues). Only those rejects and residues that are defined as military munitions are subject to reference (b).

a. Rejects or Residues that are Military Munitions. A reject or residue from manufacture, RDT&E, or renovation activities is a military munition if it is an ammunition product



are products of manufacturing, RDT&E, or renovation processes; or are undergoing quality, performance, and safety testing; and are managed within the DOD munitions accounting systems. For example, an explosive produced specifically for use in artillery ammunition that would be issued to the DoD Components would be a military munition even if the explosive did not meet production specifications. Likewise, complete ammunition items produced for use by DoD that do not meet production specifications would be military munitions. If the reject or residue is a military munition, then it is subject to the MR and the waste evaluation process described herein.

b. Rejects or Residues that are not Military Munitions. Materials that are produced incidental to manufacturing, RDT&E, or renovation processes are not military munitions. For example, wastewater or sludge from the production of explosives would not be military munitions because their production was incidental to the production of the explosives and are not intended to be used for national security or defense. If the reject or residue is not a military munition, then it must be evaluated to determine if it is a solid waste under RCRA regulations for non-munitions wastes or the analogous State regulations.

**2.16 Minutely Explosive-Contaminated Waste.** Minutely explosive-contaminated waste is any inert material such as rags, paper, wood, plastic, or metal that has come in direct contact with explosives and has only trace amounts of explosives contamination. Such items do not meet the RCRA definition of reactivity and, therefore, are not EHW. These items, however, if not being recycled still require decontamination. In addition, if any items were contaminated with anything that would make them HW (e.g., acetone), the waste would still need to be managed as a HW.

**2.17 Permitted Hazardous Waste Storage Facility.** A facility permitted under RCRA to store HW for longer time periods than allowed at accumulation sites. The specific conditions of the permit determine the types, quantities, and procedures for storing waste at the facility.

**2.18 Reclaim.** A material is reclaimed if it is processed to recover a usable product or is regenerated.

**2.19 Recycle.** A material is recycled if it is used, reused, or reclaimed.

**2.20 Waste.** Any discarded material as defined in references (a) and (c). These materials include, but are not limited to, any of the following:



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1. Any material that is disposed of, burned, or incinerated.
2. Any material that is accumulated, stored, or treated before being disposed of, burned, or incinerated.
3. Any material that is accumulated, stored, or treated instead of being disposed of, burned, or incinerated.
4. Any material that is used in a manner constituting disposal.
5. Any material that is burned for energy recovery (virgin fuels that are burned to recover energy are not considered wastes).
6. Any material that is reclaimed or accumulated speculatively.
7. Any material that is ordinarily disposed of, burned, or incinerated.
8. Any material that contains toxic constituents that is not ordinarily found in raw materials or products for which the materials substitute.
9. Any material that poses a substantial hazard to human health and the environment when recycled.

### **SECTION 3: General EHW Management Practices**

The following chapter is general guidance for EHW generators.

#### **3.1 Management Liability.**

1. If an item is a waste, it must be managed as a waste. If an item is considered a waste and is not managed properly, the generator is liable for any and all legal actions (fines and/or imprisonment) taken against him or her.

2. All efforts have to be made to dispose of EHW before the end of the accumulation time limit. It is a violation of Federal and State law to accumulate EHW for more than the time and the quantity specified at the accumulation or storage sites without proper exemptions or an extension granted by the State. When the EHW generator is having difficulty disposing of a waste and the accumulation time is fast approaching its limit, seek assistance from the Installation Environmental Compliance Department as soon as possible.

#### **3.2 Unstable or Deteriorating, Excess or Unusable Munitions and the DDA Process.**

1. Unstable or Deteriorating Munitions. A munition with an unknown stabilizer or a stabilizer that is deteriorating at an unacceptable rate presents an immediate safety hazard. When the munitions item manager or the Naval Ammunition Logistics Command (NALC) first becomes aware of unstable or deteriorating munitions, they will issue an urgent Notice of Ammunition Reclassification (NAR) under authority of the Navy DDA for ammunition. Upon receipt of a NAR, the activity storing the unstable or deteriorating munitions will:

a. Determine if the munitions identified in the urgent NAR are in their possession;

b. Follow the disposition instructions given in the NAR by the item manager or NOLSC. Urgent NARs direct the activity to execute disposition instructions (i.e., ship the EHW to either an on- or off-site permitted or interim status RCRA treatment facility) within 60 days. After that time, the unstable or deteriorating munitions must be handled as an Explosives or Munitions Emergency Response; and

c. For an urgent NAR that identifies the unstable or deteriorating material as a hazardous waste, manage it as EHW.



2. Excess or Unusable Munitions. On occasion, an activity may identify munitions as excess to an activity's needs or, through inspection, be considered defective or unusable. Since activity munitions managers do not have authority to declare these munitions as EHW, managers must:

a. Report the excess or unusable munitions to the NALC and request disposition instructions;

b. Execute NOLSC disposition instructions to either:

(1) Ship the munitions within the designated timeframe to be reused at another DoD activity or to be recycled at a DoD or commercial facility. Munitions shipped under NOLSC disposition instructions are not EHW; or

(2) Ship the munitions within the designated timeframe to an on- or off-site permitted or interim status RCRA treatment facility. This shipment must be coordinated with the Explosive Hazardous Waste Program Manager (EHWPM) or EHW Coordinator to determine if a manifest must accompany the shipment. Only when the munition is removed from storage for disposal or treatment prior to disposal does it become an EHW.

3. Whether the material is identified through a NAR or local processes, unstable/suspect energetic material may be stored in the same magazine as serviceable munitions, but must be stored separately from all other materials. These materials may be stored with unstable/suspect materials only when the conditions in OP5 are met.

**3.3 Designating EHW Locally.** In limited circumstances, local EOD personnel, in conjunction with the EHWPM, are authorized to classify a munition as an EHW. These involve MR provisions that define a munition as waste without a specific designation by a DDA and include:

1. An unused munition that is abandoned by being disposed of by burial; burned; detonated, the exception is when detonated as a consequence of intended use; incinerated; or treated prior to disposal.

2. A used military munition becomes WMM under any of the circumstances:

a. Transported off a range or from the site of use for the purposes of reclamation, treatment, disposal, or storage prior to or instead of reclamation, treatment, or disposal.

b. Recovered, collected, and then disposed of by burial,



3. Ammunition that lands off range and is not promptly destroyed in place rendered safe or retrieved.

**3.4 Identification of EHW Composition.** RCRA requires that the generator determine the composition of an EHW before it is placed in an accumulation area. When necessary, EOD should be contacted for assistance with identification. Three methods for EHW identification and characterization may be used: generator knowledge, publications, and analytical methods.

1. Generator Knowledge.

a. Known Composition. In almost all instances, the hazardous constituents and characteristics of EHW are known. Munitions in inventory are designated with a DoD Identification Code (DODIC) or Navy Ammunition Logistics Code (NALC). Local inventory managers and/or EOD detachments can use the DODIC and/or NALC to look up the filler constituents.

b. If identification is impossible via labeling, marking, DODIC/NALC, etc., two scenarios can occur depending on the visual appearance of the item.

(1) The item appears unstable or decomposed (e.g., crystals have formed and its visual appearance offers no further assistance for its identification). The item will be handled and treated as a safety emergency by EOD.

(2) The item appears stable and its visual appearance offers enough evidence for identification of the item that further handling can be allowed safely. Chemical and physical analysis to identify the item can be conducted as outlined below in this Section.

2. Publications.

a. For standard munitions waste and laboratory waste of the military munitions type, the following publications may be used to identify its physical and chemical characteristics.

(1) The classified or unclassified EOD 60-Series publications include information on obsolete, classified, and foreign military munitions, and all standard munitions.

(2) Demolition Materials and Properties NAVSEA SW060-AA-M-AA010 is used by Explosives Safety Offices, Naval Mobile Construction Battalion, Firing Officers, and EOD. This unclassified document lists national stock numbers and DODICs and NALCs (if available) for each item.



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(3) Transportation and Storage Data for Ammunition Explosives and Related Hazardous Materials NAVSEA SW020-AC-SAF-010. This unclassified document includes 8,000 Navy items and lists national stock numbers, and DODICs and NALCs (if available).

(4) List of Explosives for Navy Munitions SW010-AG-ORD-010. This document lists all explosives used in current Navy munitions.

(5) Munitions Items Disposition Action System (MIDAS). This is a web-based data source, developed by the Defense Ammunition Center, containing over 6,500 munition items. MIDAS can be found at <http://www.dac.army.mil/td/midas> or at <http://206.37.241.30/>.

### 3. Analytical Methods.

a. If a waste cannot be identified via generator knowledge or publications, the waste must be analyzed. Analysis will occur only when the stability of the waste does not threaten human safety. Analysis of waste is more applicable to laboratory waste streams than to munitions items.

b. Ideally, a representative sample of the waste is collected and analyzed by a State-certified laboratory. However, if the hazardous classification of the waste item cannot be determined because the identification of the item is unknown, then shipment of samples to an off-site certified laboratory is against DOD policy.

Depending on its origin, the waste can be analyzed by any of the following parameters and respective analytical methods.

<u>Parameter/Constituent</u>	<u>Test Method</u>
Ignitability	EPA 1010
Reactivity*	Bureau of Mines
Corrosivity	EPA 9040/9045
Toxicity	
Metals**	CCR (Total) (EPA 6010/7000)
CCR (Waste Extraction Test (WET)	
TCLP Extraction (EPA 1311)	
Toxicity	
Volatile Organics	CCR (Total) (EPA 8260)
CCR (WET)	
TCLP Extraction (Zero Headspace)	
Explosives***	EPA 8330
Volatile Organics	EPA 8260
Semi-volatile Organics	EPA 8270



\* Reactivity will be determined via the Naval Ordnance Card Gap Test for sensitivity.

\*\* The CCR metals will be determined via EPA Method 3050/6010.

\*\*\* Explosive compounds will be determined via high performance liquid chromatography using EPA Method 8330. The explosive compounds detected by EPA Method 8330 include nitrobenzene, 2,4-dinitrotoluene (DNT), 2,6-dinitrotoluene, sym-trinitrobenzene, trinitrotoluene (TNT), research department (or Royal demolition) explosive (RDX), high melting (or His/Her Majesty's) explosive (HMX), tetryl, nitrocellulose, nitroglycerin, nitroguanidine, picric acid, and pentaerythritetetranitrate (PETN).

### **3.5 Sampling and Analysis of Explosive Waste.**

1. All environmental samples that are being analyzed to determine if the waste is an EHW will meet the following sampling and analysis requirements:

a. Individuals and/or laboratories involved in the sampling and analysis shall have the proper training, certification, technical knowledge, and experience to perform the testing. Records shall be maintained on the relevant qualifications, training, skills, and experience.

b. Testing shall be performed in accordance with a controlled written procedure.

a. Fill out the appropriate information on the sample tag, or field logbook for off-site testing, and chain of custody documents.

b. Analysis data shall be maintained in the laboratory for each sample tested. Information must include identification of the procedure followed, signature and title, or equivalent of the person accepting responsibility for the content of the report, analysis findings, and any noted deviations or discrepancies.

c. Records shall be maintained on calibration status of the equipment used in the sampling or analysis testing.

d. Samples shall be taken according to the following procedures:

(1) For drums of liquid wastes, experienced Navy personnel will determine whether the drummed material is homogeneous or layered. If homogeneous, a small glass tube or



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be used to collect a sample from the entire liquid column.

(2) For a drum with no free liquids, the appropriate personnel assess the degree of homogeneity of the wastes. Stainless steel or sterile plastic spoons, spatulas, or a core sampler is used to collect grab samples from different portions of the drum, such that the composite sample represents the drum's contents.

(3) Care should be taken when obtaining samples to ensure the sample is representative of the total waste volume. If a reasonable degree of homogeneity cannot be assumed, multiple samples must be obtained, analyzed, and compared for uniformity.

(4) In addition, due caution should be taken in order to minimize direct exposure of sampling personnel to the waste being sampled. The general hazardous characteristics of the waste should be known prior to sampling to determine appropriate sampling safeguards.

(5) Potentially explosive samples to be analyzed by laboratories shall be stored separately from non-waste materials in the laboratories prior to the analysis. After being analyzed, any leftover explosive samples that are determined to be hazardous shall be stored and handled as EHW.

**3.6 EHW Accumulation Site.** The two types of EHW accumulation sites are described below. Note that HW and explosives safety regulations are applicable to all accumulation sites. When there is a conflict between these regulations, the more stringent requirement applies.

1. EHW 90-day Accumulation Area. A site where any amount of EHW may be accumulated for up to 90 days is called an EHW 90-day Accumulation Area. This site must meet the following requirements:

a. Containers must be shipped for disposal within 90 days of the accumulation start date.

b. EHW must be stored in a manner that minimizes the possibility of a fire, explosion, or any unplanned release of waste to the environment. Secondary containment is recommended for liquid wastes not already in a secondary over-pack container. The foundation of the area should be impervious to spills or leaking EHW, constructed of concrete, plastic, or metal and be compatible with the EHW being stored, with all cracks or gaps repaired or sealed. Storm or floor drains adjacent to or drainage valves located within the area should be covered, closed or



drains, sewer system or surrounding environment.

c. A spill kit and decontamination equipment, appropriate for the waste being stored, must be immediately available.

d. There must be a voice, signal, or alarm system capable of providing immediate emergency instruction to personnel at the accumulation site.

e. A communication device (telephone or radio) capable of summoning emergency assistance must be immediately available to personnel at the accumulations site.

f. There must be adequate aisle space (2 feet minimum) to allow for the unobstructed movement of personnel and emergency equipment.

a. Personnel managing a 90-day Hazardous Waste Accumulation Area must conduct and document inspections of their facility weekly (See Appendix B).

b. A fire extinguisher must be immediately available. (Fire extinguishers must be present in magazine areas to comply with Commonwealth of Virginia regulations; however, it is noted that the OP5 requirement is not to fight a fire involving explosives.)

2. EHW Satellite Accumulation Area. A site where up to 55 gallons of EHW may be accumulated is called an EHW Satellite Accumulation Site. This site must meet the following requirements:

a. Containers must be at or near the point where the waste is generated and under the control of the operator or supervisor of the process generating the waste.

b. When the quantity limitations have been reached, the waste must be moved to an EHW 90-day Accumulation Area or permitted storage facility within three days. If a container is moved to an EHW 90-day Accumulation Area, that container must be relabeled and the new accumulation start date for that container is the date that the container reached its volume or storage limitation in the satellite area.

c. The emergency preparedness and prevention equipment required to be present at EHW 90-day Accumulation Areas is recommended, but not required by environmental regulations.

3. The following requirements are applicable to EHW 90-day



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a. HW labels (also used for EHW) must be placed on containers or tanks as soon as the first drop of EHW is placed inside. Ensure each label section is properly and completely filled out with a water-resistant marker.

b. All containers and tanks must be closed unless waste is being added or removed. Ensure the containers have proper fitting and tightly secured lids, rings, or bungs.

c. Ignitable EHW must be contained in grounded containers, tanks, or metal pallets prior to conducting liquid transfer operations.

d. During consolidation or transfer operations ensure that the waste being consolidated or transferred is compatible with the container the waste will be consolidated or transferred into. Allow outage for liquid expansion when temperatures rise, and clean up any spills or puddles remaining on container tops or sides.

### **3.7 EHW/Hazardous Materials (HM) Segregation.**

1. Whenever possible, EHW shall be accumulated separately from serviceable munitions.

2. EHW may be accumulated in the same building with serviceable munitions, except for situations described in Section 3.2, only if the following conditions are met:

a. Stable EHW, except for laboratory samples, may be stored in the same magazine with other serviceable munitions but must be segregated into a readily identifiable area within the magazine.

b. EHW and serviceable munitions stored in the same magazine must be OP5 compatible.

c. Liquid wastes and the non-waste materials must not share the same secondary containment.

d. All wastes at an accumulation site must be physically located together, taking OP5 compatibility requirements into consideration. Non-waste materials must not be scattered among the waste.

**3.8 EHW Turn-in Procedures.** Ensure all EHW is properly labeled, containerized and segregated. Contact the Installation Environmental Compliance Department for assistance in EHW storage, transportation, treatment or disposal. All EHW will be



bracing, if required. Appropriately certified contractors will pick-up the EHW and transport it to a permitted treatment/disposal facility.

### **3.9 Demilitarizing Items.**

1. Before military munitions can be released from military control, they must first be certified to be free of explosives and other hazardous materials and be demilitarized in accordance with references (j) and (k). Demilitarization serves four purposes:

a. For cased munitions, demilitarization vents or opens the casing to confirm the munitions item contains no explosive filler;

b. It renders it incapable of being used for its original, military purpose;

c. It removes some the military characteristics of the item; and

d. It allows it to be released to the general public

2. Demilitarization is a common operation within the DOD. Once munitions items have been demilitarized, components (e.g., metal casings, primers, propellant, etc.) can be reused (motors may be reloaded with new propellant, etc.) or recycled (the metal parts may be sold as scrap metal). Demilitarization can be done using any person, agency, or contractor that is identified as being qualified to do so. Because demilitarization involves explosively filled (or formerly explosively filled) items, an approved SOP must be in place.

3. Waste management requirements will not apply to the demilitarization or disassembly process until after the components are separated and there is demonstrated an intent to discard.

**3.10 Explosive and Minutely Explosive-Contaminated Metals.** Since munitions demilitarization operations may produce explosive and minutely explosive-contaminated metals, the following applies:

1. All metals that have come into direct contact with explosives are classified as explosive- or minutely explosive-contaminated metals. This may include spent hardware from test firings.

a. Explosive-contaminated metals. All metals contaminated



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separate containers. Containers must be secured, except when adding additional contaminated metals. The explosive-contaminated metals must be managed as EHW.

b. Minutely explosive-contaminated metals. Those metals having insufficient explosives to support combustion or detonation are classified as minutely explosive-contaminated metals. These metals shall be placed into separate containers. Containers must be secured, except when adding additional contaminated metals. These minutely explosive-contaminated metals are not RCRA reactive and thus will not be managed as EHW.

2. Both explosive- or minutely explosive-contaminated metals can be recycled using one of the following RCRA exclusions:

a. The "processed scrap metal" exclusion from 40 CFR 261.4(a)(13) excludes recyclable materials from RCRA waste determination requirements. In other words, the recycled material never becomes a solid waste, and no waste characterization is required. Key elements of this exclusion are:

(1) The scrap metal must be 100% visually inspected and is free of hazardous (reactive/toxic) residue;

(2) The scrap metal must be recycled and not be accumulated speculatively;

(3) The scrap metal must contain no low-level radioactive materials; and

b. The "recyclable materials-scrap metal" exclusion contained in 40 CFR 261.6(a)(3)(ii). Key elements of this exclusion are:

(1) The recycled scrap metal is not subject to generator, transporter, and permitting requirements;

(2) The exclusion is applicable regardless of hazardous waste characteristics; and

(3) The exclusion is intended for scrap metal not excluded under 40 CFR 261.4(a)(13).

(4) For the "recyclable materials-scrap metal" exclusion, no waste determination and disposition records are required.

c. Activities should consult with their EHWPM to determine which exclusion is most appropriate.

metals are excluded under RCRA, OP5 interim hazard classifications may still apply to their storage and transportation, and treatment/disposal.

1. Only Navy personnel or Navy-certified contractors shall transport containers with explosive- or minutely explosive-contaminated metal scrap to the Defense Reutilization and Marketing Office (DRMO), St. Juliens Creek Annex, for disposition. Procedures described in references (j) and (k) shall be complied with.

### **3.11 Explosive and Minutely-Explosive Contaminated Non-Metals.**

1. Explosive contaminated non-metals. All non-metals contaminated with more than trace amounts of explosives shall be placed into containers. Containers must be secured, except when adding additional contaminated non-metals. The explosive-contaminated non-metals must be managed as EHW.

2. Minutely explosive- contaminated non-metals. All non-metals contaminated with trace amounts of explosives shall be placed into containers. Containers must be secured, except when adding additional minutely explosive-contaminated non-metals. These minutely explosive -contaminated non-metals are not RCRA reactive and thus will not be managed as EHW.



#### **SECTION 4: EHW Management Responsibilities**

The responsibilities for executing provisions of this EHWMP and related references are as follows.

**4.1 Naval Weapons Station Yorktown Installation Commander.** The Installation Commander (IC) shall:

1. Require each of the Departments/Tenant Commands whose operation generates or can potentially generate EHW to appoint an EHW Coordinator. The EHW Coordinator shall be an individual with applicable specialized explosive technical skills and expertise that supports the EHW Program as outlined herein.

2. Ensure that any agency, firm, or individual contracted by the installation conforms to this EHWMP.

3. Ensure activities appoint, in writing, qualified individuals to certify material that presents a potential explosive hazard as inert for turn-in to DRMO.

4. Through the Regional Explosive Hazardous Waste Program Manager (EHWPM) ensure the installation is in full compliance with the policies, guidance, and directions in this EHWMP, as well as all applicable Federal and State laws, and Navy instructions.

5. In coordination with EHWPM, implement RCRA waste minimization efforts for EHW.

**4.2 EHW Program Manager.** The EHWPM will be a Regional Hazardous Waste Program Manager who has overall responsibility for overseeing the EHW management program for WPNSTA Yorktown, tenants, and contractors. Specifically, the EHWPM shall:

1. Maintain and distribute this EHWMP.

2. Maintain contact information of all EHW Coordinators and EHW Handlers.

3. Maintain a list of authorized EHW accumulation areas.

4. Provide direction and guidance to the EHW Coordinators and installation environmental staff on the interpretation and requirements of Navy environmental policy and environmental laws and regulations applicable to EHW management.

5. Through the installation Environmental Compliance Department provide proposals and advice to the installation IC on



6. Coordinate with environmental regulatory agencies on precedent setting EHW issues related to environmental compliance.

7. Assist the EHW Coordinators in the disposal of all EHW, ensuring that it is done in accordance with applicable laws, regulations, and instructions.

8. Ensure comprehensive EHW Environmental Quality Assessments for EHW are conducted on an annual basis.

9. Establish and maintain, or monitor, a system to track environmental documentation of EHW off-site disposal and transportation.

10. Respond to all appropriate data requests related to environmental regulatory compliance at the installation level.

11. Assist the EHW Coordinators in the preparation and implementation of new EHW plans, SOPs, etc, as requested.

12. Provide information and assistance to Departments/Tenants that are considering process changes to reduce the generation of EHW.

13. Ensure the training outlined in Appendix C is provided to all personnel involved in the generation, accumulation, handling or disposal of EHW.

14. Collect and maintain a summary of financial information on EHW management costs, including disposal, as required.

15. Ensure implementation of RCRA waste minimization efforts for EHW.

**4.3 EHW Coordinators.** The head of each department, tenant, and contractor that generates or can potentially generate EHW will appoint one primary EHW Coordinator. Specifically, the EHW Coordinator shall:

1. Maintain and distribute this EHWMP.

2. Maintain a current list of authorized EHW accumulation areas. This list shall contain the names of the primary and alternate EHW Custodian.

3. Determine which items meet the definition of EHW based upon instructions from the NOLSC and/or the most current Navy policy, applicable environmental laws and regulations, and guidance from the EHWPM. Coordinate the disposition of EHW with



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4. Ensure EHW is stored in an EHW 90-day accumulation area, an EHW satellite accumulation area, or an appropriately permitted HW storage facility, in accordance with applicable Federal, State, local laws and regulations as well as Navy policy.

5. Coordinate with EHWPM during explosive emergencies to ensure environmental requirements are followed.

6. Ensure EHW is properly packaged, marked, and labeled in accordance with all applicable requirements.

7. Participate in the training program as outlined in Appendix C.

8. Ensure appropriate inspections of EHW are conducted. Coordinate required corrective actions resulting from inspections of the accumulation areas or evaluations of the EHW handling practices.

9. Assist in response to applicable data requests not related to environmental compliance such as Navy or DOD requests for inventory, accumulation capabilities, and projected EHW generation as requested.

10. Provide information and support to the EHWPM, as needed, for environmental compliance related data requests.

11. Review all applicable SOPs for compliance with EHW management requirements.

12. Ensure the installation is in full compliance with the policies, guidance, and directions in this EHWMP, as well as all applicable Federal and State laws, and Navy instructions.

13. Implement RCRA waste minimization efforts for EHW.

14. Ensure process planning and equipment design or acquisition will include considerations for EHW funding, handling, control and disposal.

**Note:** For contractors, EHW Coordinators will ensure any contractor Statements of work shall include language and specify performance accordingly.

**4.4 EHW Custodian.** The head of each department, tenant activity, and contractor that generates or can potentially generate EHW will appoint one primary and one alternate EHW Custodian (EHWH). Specifically, the EHWH shall:



2. Ensure that EHW is placed in proper containers and is properly segregated, stored, and labeled.
3. Respond to spill/incidents according to applicable procedures, SOPs, and local Emergency Management and Spill Response Plans as training level allows.
4. Inventory the contents of all EHW at accumulation and storage areas.
5. Maintain inspection logs of local EHW accumulation and storage areas.
6. Ensure that he/she, and all other EHW workers, is trained as outlined in Appendix C.
7. Ensure that all EHW workers are qualified and certified to perform EHW explosive operations.
8. Ensure adequate spill response equipment is maintained.
9. In coordination with EHWPM, implement RCRA waste minimization efforts for EHW.
10. Provide required inspection reports to the EHW Coordinator and EHWPM.
11. Report any new or unknown EHW streams to the EHW Coordinator.
12. Coordinate with EHWPM to determine if waste must be managed and disposed of as an EHW.
13. Accumulate all EHW in either a 90-day or satellite EHW accumulation area until the waste is transferred off-site.
14. Mark containers with the words "HAZARDOUS WASTE" and the contents as soon as the first item of EHW is put in the container, using a HW label or a name that clearly identifies the contents of the container. Ensure containers are grounded, as appropriate.
15. Ensure that only compatible wastes are placed in the same container. Do not place EHW in an unwashed container that previously held an incompatible waste or material.
16. Keep all containers closed, except when adding or removing waste. Do not open, handle, or store the container in a manner that may rupture the container or cause it to leak.



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17. Ensure that no more than 55-gallons of EHW is collected at satellite accumulation areas. A site may have more than one container to accumulate EHW (e.g. to separate incompatible wastes), but the total amount of waste accumulated must not exceed the quantity limits. Note: If the site contains multiple containers, one (or more) of the containers may be moved to an EHW 90-day site. Do not exceed any explosive limits that may be imposed for the site, according to OP5.

18. Provide secondary containment for all liquid wastes. This containment system must have the capacity to contain at least 10% of the total volume of all the containers or the volume of the largest container, whichever is greater. The containment must be made of or lined with materials that are compatible with the liquid waste to be accumulated, free of cracks or gaps, and sufficiently impervious to contain leaks and spills. Examples of secondary containment are catch pans or secondary containment pallets. Note: Incompatible wastes cannot share a secondary containment system.

19. Provide weather protection for any secondary containment systems. If rainwater enters the secondary containment system, the available volume of the containment system decreases, affecting its ability to contain a leak of the EHW. If a leak occurs, the now-contaminated rainwater must be managed as EHW until proven otherwise.

20. Ensure that non-hazardous waste and EHW are not accumulated in the same container or secondary containment system. This is to avoid cross-contamination and generation of additional HW.

21. Locate any new outdoor explosive satellite accumulation area a minimum of 50 feet from any explosives operating building.

22. Fill each container to no more than 95% of its maximum capacity to allow room for expansion.

23. Add an adequate amount of sawdust to slum liquid EHW in order to ensure that no free liquids exist. If the liquid EHW is not compatible with sawdust, contact EHWPM for approval of a suitable substitute. If the liquid EHW is being generated in such large quantities that it is impractical to slum, then accumulate in approved DOT containers for shipment off-site.

24. Identify empty containers in satellite accumulation sites with blank HW stickers, labels, or tags. All other markings must be removed.



25. Conduct weekly inspections at EHW 90-day Hazardous Waste Accumulation Areas. A hazardous waste accumulation area weekly inspection checklist is included in Appendix B.

**4.5 Explosives Safety Officer.** The Explosives Safety Officer will support the EHW Program with specialized safety skills. Specifically, they shall:

1. Ensure all EHW SOPs meet the requirements of reference (i).

2. When needed, assist with EHW minimization efforts and assist generators of EHW with proper safety requirements for accumulation, handling, packaging, and transporting EHW.



## SECTION 5: Emergency Response Procedures

### 5.1 Emergency and Non-Emergency Procedures and Spill Equipment.

1. The purpose of this section is to inform personnel on the process in which EHW spills or releases are handled and reported and to maintain consistency with the spill/release notification requirements. However, due to the inherent reactive nature of EHW and the safety requirements in OP5, some of the following procedures may not apply (e.g., do not use a fire extinguisher to fight a fire involving munitions).

2. Upon discovery of any spill or release that meets any of the criteria below, follow the procedures outlined in Section 5.2.

- a. Any spilled substance, regardless of volume; or
- b. Any spilled substance that enters a storm drain, sewer system or body of water; or
- c. Any spilled substance that is not easily contained and/or requires outside assistance to clean up; or
- d. Any spilled substance that threatens human health, safety and/or the environment or that is an unknown substance.

3. For spills/releases of any EHW meeting the criteria above, do the following:

- a. Notify: Call 887-4911. Explain that there is an emergency situation involving explosives so that the appropriate EOD personnel may respond as described in Section 5.2 below.
- b. Secure: Limit the access of personnel to where the spill/release has occurred. Use barrier tape or other warning items or signs to restrict access to the surrounding area.
- c. Identify: Determine what type of substance was spilled/released by obtaining information pertaining to the substance.
- d. Isolate: If safe, prevent the spill from spreading. Cover or dike any nearby floor, storm, or sewer drains.

4. The command that has responsibility for the area where the spill/release occurred or was discovered shall coordinate all internal and external reporting requirements in accordance with Navy policy.



a. Spill control: Spill kits containing absorbent materials (socks, pads, kitty litter) must be located near the storage/work areas to clean up and control leaking or spilled substances or wastes.

b. Communication devices: Telephones, two-way radios, or alarms must be located at or near the EHW accumulation areas to notify emergency response personnel (fire, security, EOD) in case of a spill/release or injury.

c. Fire fighting: Portable fire extinguishers or other fire suppression equipment designed to extinguish the specific EHW being stored must be available at or near the storage area.

d. Decontamination: Eyewash and/or shower stations (depending on the substance being handled) shall be located at or near the accumulation area or operating process.

e. Equipment maintenance: Ensure that all communication, fire fighting, and other emergency equipment is regularly tested and maintained in proper operating condition.

#### **5.1 Explosives or Munitions Emergency Responses.**

1. When Explosive Ordnance Disposal (EOD) Detachment Yorktown personnel conduct an emergency response, they may determine that:

a. An immediate response is required. In this situation, according to 40 CFR 270.1 (c)(3)(i)(D), the MR's immediate response exemption from RCRA permitting applies.

b. An immediate response is not required, but the situation poses an imminent and substantial risk to human health or the environment. In this situation, the MR's immediate response exemption from RCRA may not apply. EOD should consult with the installation's Environmental Compliance Department.

c. An emergency response is not required. In these situations, continued support by the EOD emergency response specialists may not be required and the items may or may not be EHW.

#### **2. Level 1-Immediate Response.**

a. EOD personnel will use established procedures and good judgment to determine whether a situation requires a Level 1 response. Once the situation is determined as a Level 1 emergency, only EOD personnel are authorized to conduct Level 1 responses. Environmental permitting is not required.



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b. EOD personnel will take whatever action is necessary to control or eliminate the immediate threat. Such actions may include the movement (transport) of an item to a safer location for defusing, detonation, or the performance of render-safe procedures. EOD personnel are the only authority that can determine when a Level 1 response is terminated.

c. When extenuating circumstances (e.g., adverse weather, nightfall, safety) delay actions necessary to terminate an explosives or munitions emergency, the response may be delayed until the necessary action can be completed. EOD personnel, with the assistance of Explosives Safety Officer and Security Protection Forces, must ensure the explosives or munitions are in a safe and secure environment.

d. Once EOD personnel determine the Level 1 response is over, remaining WMM, if any, must be collected and the installation Environmental Compliance Department must be notified to determine whether it should be managed as HW. The EHWPM will coordinate with EOD personnel to dispose of any EHW according to Federal, State, and local regulations.

e. EOD personnel, upon completion of the emergency response, shall prepare an incident report. The response unit shall retain this report for three years. The report shall identify the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

### 3. Level 2--Imminent and Substantial Endangerment Response.

a. EOD personnel must determine whether the response action can be delayed until an emergency permit can be obtained without compromising safety or the environment. Once the situation is determined as a Level 2 emergency, the EHWPM shall contact the Virginia Department of Environmental Quality to obtain an emergency permit by telephone and immediately follow up with a written request according to 40 CFR 270.61. After receiving the emergency permit, EOD personnel may conduct the Level 2 response.

b. EOD personnel will take whatever action is necessary to control or eliminate the imminent and substantial endangerment threat. Such actions may include the movement (transport) of an item to a safer location for defusing, detonation, or the performance of render-safe procedures.

c. Once EOD personnel determine the Level 2 response is over, remaining WMM, if any, must be collected and the

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to determine whether it shall be managed as HW. The EHWPM will coordinate with EOD personnel to dispose of any EHW according to Federal, State, and local regulations.

d. EOD personnel, upon completion of the emergency response, shall prepare an Incident Report. The response unit shall retain this report for three years. The report shall identify the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

4. Pre-Planned EOD Support. If EOD personnel determine that emergency responses are not required for a situation, EOD may still be requested to handle the EHW. However, if disposal support is requested from EOD, the EHWPM shall ensure that the operations comply with RCRA requirements or applicable State regulations.



## APPENDIX A: DEFINITIONS OF HAZARDOUS WASTE (HW)

1. A waste is a HW if it exhibits any of the characteristics of HW or is specifically listed in the CFR, CCR, or NAC.

2. The four HW characteristics are described below:

### a. Ignitability.

(1) It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, and has a flash point less than 60°C (140°F), as determined by a Pensky-Martens Closed Cup Tester (ASTM Standard D-93-79 or D-93-80) or a Setaflash Closed Cup Tester (ASTM Standard D-3278-78); or

(2) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture, or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard; or

(3) It is an ignitable compressed gas; or

(4) It is an oxidizer.

### b. Corrosivity.

(1) It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5; or

(2) It is a liquid and corrodes steel (SAE 1020) at a rate greater than 0.250 inches (6.35 mm) per year at a test temperature of 55°C (130°F) using test method NACE Standard TM-01-69; or

### c. Reactivity.

(1) It is normally unstable and readily undergoes violent change without detonating; or

(2) It reacts violently with water; or

(3) It forms potentially explosive mixtures with water; or

(4) When mixed with water, it generates toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment; or

(5) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment; or

(6) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement; or

(7) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure; or

(8) It is a forbidden explosive as defined in Department of Transportation regulations.



## HAZARDOUS WASTE 90-DAY ACCUMULATION AREA (HWAA) CHECKLIST

INSPECTOR:	DATE:	TIME:
AREA:		
CUSTODIAN:	PHONE No.:	
CODE/UNIT:		
All "NO" answers require the violation to be noted and corrected. Comment may include violation description, action, date action completed, and other pertinent details.		
<i>HWAA Compliance Questions</i>	<i>Circle Answer</i>	<i>Comment</i>
1. Are good housekeeping standards employed?	Yes No	
2. Is the area free of any spills or container overfills (waste product on the container lid)?	Yes No	
3. Is a fire extinguisher located and available within 50 feet?	Yes No	
4. Is spill control equipment (examples: absorbents) available at the Site?	Yes No	
5. Are HW inspections conducted and properly documented every 7 days?	Yes No	
6. Are HW inspection records kept for 3 years or from the beginning, whichever shorter?	Yes No	
7. Has the HW manager received annual training? Note: 24 Hour Initial Hazardous Waste Handler/Generator Training and 8 Hour Hazardous Waste Refresher Training required.)	Yes No	
8. Are "HAZARDOUS WASTE ACCUMULATION AREA" sign and emergency contact information posted at the site?	Yes No	
If there is no hazardous waste currently stored at the site, <u>answer N/A</u> for the remainder of checklist.		
9. Is "NO SMOKING" sign posted if ignitable or reactive wastes are stored?	Yes No N/A	
10. Are HW containers in good condition (non-leaking or non-corroded) and compatible with the waste stored in them?	Yes No N/A	
11. For hazardous waste containing volatile organics, are individual HW containers either (circle applicable items) a. less than 26 gallons? b. 26 or greater but less than 119 gallons; and DOT approved?	Yes No N/A	
12. Are incompatible wastes separated by a wall, berm, or overpack to prevent mixing?	Yes No N/A	

13. Are HW containers kept sealed except when waste is being added or removed?	Yes	No	N/A	
14. HW labels a. on the containers? b. clearly visible and facing out for inspection? c. include the words, "HAZARDOUS WASTE?" d. include specific contents of the waste(s)? e. include the accumulation date?	Yes	No	N/A	
15. Are old HW labels & markings removed?	Yes	No	N/A	
16. Are all HWs stored less than 90 days?	Yes	No	N/A	
17. Are adequate aisle spaces maintained for incident response?	Yes	No	N/A	



## APPENDIX C: TRAINING PLAN

1. Personnel who have the potential to manage EHW shall successfully complete Munitions Rule training. (CECOS RCRA for Military Munitions, on-the-job training, or equivalent)

2. In addition to the above requirement, personnel who actually manage EHW shall successfully complete a HW training program per references (a) and (b). This training program must be directed by a person trained in HW management procedures and shall include instruction dealing with HW management operations, emergency procedures, and compliance requirements. At a minimum, this program shall be designed to ensure the personnel:

a. Are able to respond effectively to emergencies by familiarizing themselves with emergency procedures, equipment and systems that are specific to their operations.

b. Are able to identify, separate, and segregate HW by hazard class and/or compatibility.

c. Are able to properly containerize, manage, and label HW.

d. Conduct HW accumulation area inspections by identifying deficiencies and performing corrective actions.

e. Take part in an annual review of the initial HW training as it applies to their assigned duties.

f. Comply with all requirements identified in this EHWMP.

Personnel who actually manage EHW must successfully complete the initial training within six months after the date of their employment or assignment to a new position and cannot work unsupervised until they have completed the initial training requirements. Annual refresher training can be provided as on-site or off-site classroom or as documented on-the-job training (i.e., safety stand-downs, weekly safety stand-up meetings, hazard control briefings). (CECOS Introduction to Hazardous Waste Generation and Handling, CECOS RCRA Hazardous Waste Review, or equivalent)